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10/665,772	09/19/2003	Shuji Inoue	9432-000237	6372

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EXAMINER	
PARK, JEONG S	

ART UNIT	PAPER NUMBER
2154	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/665,772	INOUE ET AL.	
	Examiner	Art Unit	
	Jeong S. Park	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 June 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to communications filed June 29, 2007.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2 and 8-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewert et al. (hereinafter Ewert)(U.S. Patent Pub. No. 2001/0034586 A1), and further in view of Bakke et al. (hereinafter Bakke)(U.S. Patent No. 6,330,621 B1).

Regarding claims 1 and 27, Ewert discloses as follows:

A resource manager or a method for a security system network (a system for monitoring a property and controlling electrical devices located at the property via a network, see, e.g., page 1, paragraph [0004], lines 1-3) comprising;

One or more devices for collecting (I/O devices for collecting data, reference character 12 in figure 1) and/or managing data (controller for managing the data, reference character 10 in figure 1) from an environment (see, e.g., page 1, paragraph [0018]);

One or more users (user, reference character 22 in figure 1) that submit operation requests for the data (see, e.g., page 1, paragraph [0017]); and

A controller (controller, reference character 10 in figure 1) that receives the operation requests (controller adapted to receive a request from the network, see, e.g.,

page 1, paragraph [0004]), caches and determines load characteristics of the one or more devices (controller receives unsolicited messages which provides status updates on the functions of various I/O hardware, see, e.g., page 2, paragraph [0032]) and allocates the devices to the operation requests according to the load characteristics (controller forward requests from the user to I/O hardware which means the I/O hardware has been allocated to the requests, see, e.g., page 2, paragraph [0031]).

Bakke discloses as follows:

An intelligent data storage manager uses weighted values that are assigned to each of the presently defined logical devices to produce a best fit solution to the requested policies (see, e.g., col. 2, lines 32-36);

a flow information service storing in a computer readable medium descriptions of media flows in one or more networks (policy requirements for storing a user data object, see, e.g., col. 3, lines 26-31), including source device and network destination device and network, media flow type, and required bandwidth, wherein these information are inherently exchanged during any data communications (policy attributes, see, e.g., col. 3, line 56 to col. 4, line 34 and table 1);

a controller (data storage manger 110 in figure 1 and/or logical device manager 104 in figure 1) that receives operation requests (the data storage manager is responsive to one of the host processors initiating a data write operation, see, e.g., col. 4, lines 36-40), caches and determines load characteristics (data storage characteristics) of the one or more devices based on the descriptions of media flows (policy requirements)(the logic device manager allocates or creates a logical device

based upon policies for storing the user data object, see, e.g., col. 3, lines 10-14), and allows users to dynamically changes (user requirements are managed by users) an allocation policy (user requirements) of one or more devices to the operation requests according to the combination of weighted score (weighted values) of user defined data placement preference, load characteristics (data storage characteristics), and network communication cost (cost of storage) associated with the media flows (see, e.g., col. 3, lines 32-50).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Ewert to include the storage manager to allocate user requests to proper storage device based on the storage device characteristics and the user requirements as taught by Bakke in order to intelligently allocate one proper device among a plurality of devices.

Regarding claims 2, Ewert discloses that the controller generates allocation requests that attempt to allocate the operation requests to the devices in response to the operation requests (controller forward requests from the user to I/O hardware which means the I/O hardware has been allocated to the requests, see, e.g., page 2, paragraph [0031]).

Regarding claim 8, Ewert discloses that the devices include a camera that collects multimedia data (I/O devices including digital or analog camera to monitor current images, see, e.g., page 2, paragraph [0018]).

Regarding claim 9, Ewert discloses that the camera streams the multimedia data in one or more media formats (GRABD, reference character 30 in figure 2, converts the image to a standard format such as JPEG, see, e.g., page 2, paragraph [0029]).

Regarding claim 10, Ewert discloses that the resource manager comprising a multimedia recorder (data storage device, reference character 14 in figure 1) that records the multimedia data (data storage device stores information from I/O devices, see, e.g., page 1, paragraph [0018], lines 1-8).

Regarding claim 11, Ewert discloses that the multimedia recorder plays the multimedia data in response to the operation requests (the user can monitor recorded information from the data storage device, see, e.g., page 1, paragraph [0018], lines 14-20).

Regarding claim 12, Ewert discloses that the resource manager comprising an analyzer server (GRABD, IFXD, CONTROLD components, reference characters 30, 34, 32 respectively in figure 2, working as an analyzer server) that collects meta-data (list of files) from the multimedia data (IFXD responds with a list of files which is colleted from the stored image data, see, e.g., page 3, paragraph [0037]).

Regarding claim 13, Ewert discloses that the analyzer server collects the meta-data (indication of the image resolution) directly from the camera (GRABD captures images from one or more cameras indicating the desired resolution of the images, see, e.g., page 2, paragraph [0029]).

Regarding claim 14, Ewert discloses that the analyzer server collects the meta-data from the multimedia recorder (IFXD responds with a list of files stored in the data storage device, see, e.g., page 3, paragraph [0037]).

Regarding claim 15, Ewert discloses that a meta-data server (data storage device, reference character 50 in figure 2) that stores the meta-data (reason for doing so is interpreted as a meta-data)(IFXD capture an image from a particular camera and a reason for doing so and stores in the data storage device, see, e.g., page 3, paragraph [0033], lines 14-22).

Regarding claim 16, Ewert discloses that the operation requests include searching the meta-data server (data storage device) for meta-data (requests can be sent to IFXD for image that satisfy various criteria such as times, reasons, channels, and the like, wherein the image is stored at the data storage device, see, e.g., page 3, paragraph [0034]).

Regarding claim 17, Ewert discloses that the operation requests include:

Record requests (in response to the request IFXD captures images and save them to a data storage, see, e.g., page 3, paragraph [0034]);

Analysis requests (requests can be sent to IFXD for image that satisfy various criteria such as times, reasons, channels, and the like, see, e.g., page 3, paragraph [0034]);

Play requests (user to view in real time the current status including audio and video surveillance, see, e.g., page 1, paragraph [0005], lines 4-7); and

Search requests (provide a list of files that satisfies the request, see, e.g., page 3, paragraph [0037], lines 5-10).

Regarding claim 18, Ewert discloses that the record requests include at least one of a source camera identifier, a media recording format, a recording purpose, and a duration of recording (requests can be sent to IFXD for image that satisfy various criteria such as times, reasons, channels, and the like, see, e.g., page 3, paragraph [0034]).

Regarding claim 19, Ewert discloses that the analysis request includes a source camera identifier (requested camera) and a duration (a single or a sequence of frame) of analysis (GRABD captures an image from the requested camera and the image may be a single frame or a sequence of frame taken at a particular interval, see, e.g., page 3, paragraph [0038], lines 1-8).

Regarding claims 20 and 21, Ewert discloses that the analysis and play requests include an identity and a location of a multimedia file (request for images can be directly sent to GRABD for current images from the cameras or sent to IFXD for stored images from the data storage device, see, e.g., page 3, paragraph [0037]).

Regarding claim 22, Ewert discloses that the resource manager comprising an Internet gateway server (HTTPD component, reference character 38 in figure 2) that connects the users to the security system network (HTTPD is run in response to user requests via a network using a web browser, see, e.g., page 3, paragraph [0036], lines 1-5 and figure 1).

Regarding claims 23 and 28, Ewert discloses that the controller generates a schedule for the requests based on the load characteristics (requests may be made at any periodic interval in order to create a desired storage history such as once per second, once per minute, once per hour or any other increment, see, e.g., page 3, paragraph [0042], lines 6-9).

Regarding claims 24 and 29, Ewert discloses that the controller prioritizes the operation requests (multiple requests are formulated in the appropriate manner and forwarded to other components of the system, see, e.g., page 3, paragraph [0036]).

Regarding claim 25, Ewert discloses that the operation requests are generated by one of a user (see, e.g., page 1, paragraph [0017]), an alarm (detection of an event may trigger a request for an image to be taken by a camera, see, e.g., page 3, paragraph [0040], lines 8-11), and a scheduled event (requests may be made at any periodic interval in order to create a desired storage history, see, e.g., page 3, paragraph [0042], lines 6-9).

Regarding claim 26, Ewert discloses that a resource manager for a security system network comprising:

A camera that collects multimedia data (I/O devices including digital or analog camera to monitor current images, see, e.g., page 2, paragraph [0018]);

A multimedia recorder that stores the multimedia data (data storage device stores information from I/O devices, see, e.g., page 1, paragraph [0018], lines 1-8);

An analyzer that extracts meta-data (list of files) from the multimedia data (IFXD

responds with a list of files which is colleted from the stored image data, see, e.g., page 3, paragraph [0037]);

One or more users that submit operation requests for the data (see, e.g., page 1, paragraph [0017]); and

A controller that receives the operation requests, communicates with the camera, the multimedia recorder, and the analyzer to determine load characteristics (controller receives unsolicited messages which provides status updates on the functions of various I/O hardware, see, e.g., page 2, paragraph [0032]), and allocates the operation requests according to the load characteristics (controller forward requests from the user to I/O hardware which means the I/O hardware has been allocated to the requests, see, e.g., page 2, paragraph [0031]).

Bakke discloses as follows:

An intelligent data storage manager uses weighted values that are assigned to each of the presently defined logical devices to produce a best fit solution to the requested policies (see, e.g., col. 2, lines 32-36);

a flow information service storing in a computer readable medium descriptions of media flows in one or more networks (policy requirements for storing a user data object, see, e.g., col. 3, lines 26-31), including source device and network destination device and network, media flow type, and required bandwidth, wherein these information are inherently exchanged during any data communications (policy attributes, see, e.g., col. 3, line 56 to col. 4, line 34 and table 1);

a controller (data storage manger 110 in figure 1 and/or logical device manager 104 in figure 1) that receives operation requests (the data storage manager is responsive to one of the host processors initiating a data write operation, see, e.g., col. 4, lines 36-40), caches and determines load characteristics (data storage characteristics) of the one or more devices based on the descriptions of media flows (policy requirements)(the logic device manager allocates or creates a logical device based upon policies for storing the user data object, see, e.g., col. 3, lines 10-14), and allows users to dynamically changes (user requirements are managed by users) an allocation policy (user requirements) of one or more devices to the operation requests according to the combination of weighted score (weighted values) of user defined data placement preference, load characteristics (data storage characteristics), and network communication cost (cost of storage) associated with the media flows (see, e.g., col. 3, lines 32-50).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Ewert to include the storage manager to allocate user requests to proper storage device based on the storage device characteristics and the user requirements as taught by Bakke in order to intelligently allocate one proper device among a plurality of devices.

Regarding claims 40 and 41, Bakke discloses as follows:

said controller (logic device manager, 104 in figure 1) assigns scores to the one or more devices (logic device manager uses weighted values that are assigned to each of the presently defined logical devices, see, e.g., col. 3, lines 32-35) according to the

weighted sum formula in terms with available bandwidth (time to first byte), available disk space (MB/sec read and write) and available concurrency (see, e.g., col. 6, lines 16-44 and table 2); and

said controller employs the scores assigned to the one or more devices to determine how to allocate the devices, and the weights are user configurable (logic device manager uses weighted values that are assigned to each of the presently defined logical devices, see, e.g., col. 3, lines 32-35).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Ewert to include assigning scores to the devices to determine how to allocate the devices as taught by Bakke in order to intelligently allocate one proper device among a plurality of devices.

4. Claims 3-7 and 30-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewert et al. (hereinafter Ewert)(U.S. Patent Pub. No. 2001/0034586 A1) and Bakke et al. (hereinafter Bakke)(U.S. Patent No. 6,330,621 B1) as applied to claims 1, 2 and 8-29 above, and further in view of Nozaki (U.S. Patent No. 6,128,644).

Regarding claims 3, 4, 7 and 33-35, Ewert discloses as follows:

The controller generates the load characteristics (controller receives unsolicited messages which provides status updates on the functions of various I/O hardware, see, e.g., page 2, paragraph [0032]).

Ewert does not disclose the detail content of the load characteristics in the graphical representation form.

Nozaki disclose as follows:

A load distribution system, a server status management (reference character 5a in figure 1) obtains the amount of processing of each server collected by the server status notification (reference characters 3a, 4a in figure 1) to manage a load status of each server (see, e.g., abstract and figure 1); and

A server status management table (reference character 123a in figure 6) includes representative DNS, individual DNS (location of the devices), load (current media flow of the devices), ratio, and status (availability of the devices)(see, e.g., col. 9, line 56 to col. 10, line 18).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Ewert to include a graphical representation of the load status of each server as taught by Atkins in order to present efficiently and clearly the information to users.

Regarding claims 5 and 6, Ewert discloses all the limitations of claim as explained above except for the media flow data including a source identifier, a media format, a media bandwidth requirement, a multi-cast address, and a service identifier

Nozaki disclose that there is stored load or packets per unit time being processed by a corresponding server having an individual DNS name (see, e.g., col. 10, lines 3-6).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Ewert to include the media flow data information as taught by Atkins in order to present efficiently and clearly the information to users.

Regarding claims 30-32, Ewert discloses all the limitations of claim as explained above except for disclosing the detail steps.

Nozaki disclose as follows:

Determining a set of candidate devices (list individual DNS names of respective servers integrated into, see, e.g., col. 9, line 66 to col. 10, line 3);

Assigning scores (relative amount of processing) to each candidate device in the set, and communicating with the candidate devices according to the scores (see, e.g., col. 10 lines 25-45).

Calculating the scores according to a current load, a location on the network, and existing media flows (the relative amount of processing is obtained by dividing the "load" value" by the "ratio" value, see, e.g., col. 10 lines 25-45); and

Determining availability of the candidate devices ("status" shows the operating status of each respective server, see, e.g., col. 10 lines 15-18).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Ewert to include the detail steps of determining candidate devices as taught by Atkins in order to communicate with the reliable devices.

Regarding claims 36 and 37, Ewert discloses all the limitations of claim as explained above except for determining costs of allocating the network resources and storing the costs in a matrix.

Nozaki disclose that determining costs of allocating the network resources (the relative amount of processing is obtained by dividing the "load" value" by the "ratio" value and makes the determination to send the request to the more efficient server, see, e.g., col. 10 lines 25-45).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Ewert to include determining costs of allocating network resources as taught by Atkins in order to communicate with the reliable and cost-efficient network resources.

Regarding claims 38 and 39, Ewert discloses all the limitations of claim as explained above except for generating a set of rules and allocating the network resources according to the set of rules.

Nozaki disclose that generating a set of rules (sending to the lower relative amount of processing) and allocating the network resources according to the set of rules (calculating the relative amount of processing and allocating to the lower relative amount of processing server, see, e.g., col. 10 lines 25-45).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Ewert to include determining a set of rule for allocating as taught by Atkins in order to communicate systematically and reliably based on the network environment.

Response to Arguments

5. Applicant's arguments filed 6/29/2007, with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection.

A. Summary of Applicant's Arguments

In the remarks, the applicant argues as followings:

1) Regarding independent claims 1, 26 and 27, Ewert et al., however, do not teach a flow information service storing in a computer readable medium descriptions of

media flows in the surveillance, including source device and network, destination device and network, media flow type, and required bandwidth. Nor do Ewert et al. teach a controller that receives operation requests, determines load characteristics of the one or more devices based on the descriptions of media flows, and allocates the one or more devices to the operation requests according to load characteristics.

2) New claims 40 and 41

B. Response to Arguments:

In response to argument 1) the amended claims 1, 2 and 8-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewert et al. (hereinafter Ewert)(U.S. Patent Pub. No. 2001/0034586 A1), and further in view of Bakke et al. (hereinafter Bakke)(U.S. Patent No. 6,330,621 B1) as explained above.

Therefore, all dependent claims 3-7 and 30-39 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Ewert et al. (hereinafter Ewert)(U.S. Patent Pub. No. 2001/0034586 A1) and Bakke et al. (hereinafter Bakke)(U.S. Patent No. 6,330,621 B1) as applied to claims 1, 2 and 8-29, and further in view of Nozaki (U.S. Patent No. 6,128,644).

In response to argument 2) new claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewert et al. (hereinafter Ewert)(U.S. Patent Pub. No. 2001/0034586 A1), and further in view of Bakke et al. (hereinafter Bakke)(U.S. Patent No. 6,330,621 B1) as explained above.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeong S. Park whose telephone number is 571-270-1597. The examiner can normally be reached on Monday through Thursday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP

August 30, 2007

NATHAN FLYNN
SUPERVISORY PATENT EXAMINER